# INTEGRATED SUPPORT ENVIRONMENT (ISE) ELEMENT USERS GUIDE

(Deliverable 0424) (Revision 1)

RTM to ISE Application (RTM\_X\_ISE)

Volume 6 of 6

March 11, 1998

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# RTM to ISE Application (RTM\_X\_ISE)

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# Integrated Support Environment (ISE) System Requirements

Fairmont, WV 26554

# TABLE OF CONTENTS

Section	<u>Page</u>
1.1 RTM to ISE Application	1
1.1.1 RTM-TO-ISE Installation and Startup	
1.1.2 RTM-TO-ISE Graphical User Interface	
1.1.2.1 RTM-TO-ISE Login Screen	
1.1.2.2 RTM-TO-ISE Toolbar	
1.1.2.3 RTM-TO-ISE Requirements Analysis Screen .	
1.1.2.4 RTM-TO-ISE Clarification Text Analysis Scre	een
1.1.2.5 RTM-TO-ISE Release Analysis Screen	
1.1.2.6 RTM-TO-ISE Requirement Type Analysis Scr	reen
1.1.2.7 RTM-TO-ISE Requirement Status Analysis Sc	
1.1.2.8 RTM-TO-ISE Segment Analysis Screen	
1.1.2.9 RTM-TO-ISE Source Interface Analysis Scree	rn
1.1.2.10 RTM-TO-ISE Destination Interface Analysis	

# TABLE OF EXHIBITS

<u>Exhibit</u>	<u>Page</u>
EXHIBIT 1.1.2-1 RTM-TO-ISE MENU HIERARCHY	2
EXHIBIT 1.1.2-2 RTM-TO-ISE LOGIN SCREEN	3
EXHIBIT 1.1.2-3 RTM-TO-ISE TOOLBAR	4
EXHIBIT 1.1.2-4 RTM-TO-ISE REQUIREMENTS ANALYSIS SCREEN	7
EXHIBIT 1.1.2.5 RTM-TO-ISE CLARIFICATION TEXT ANALYSIS SCREEN	
EXHIBIT 1.1.2.6 RTM-TO-ISE RELEASE ANALYSIS SCREEN	11
EXHIBIT 1.1.2.7 RTM-TO-ISE REQUIREMENT TYPE ANALYSIS SCREEN	13
EXHIBIT 1.1.2-8 RTM-TO-ISE REQUIREMENT STATUS ANALYSIS SCREEN	
EXHIBIT 1.1.2-9 RTM-TO-ISE SEGMENT ANALYSIS SCREEN	17
EXHIBIT 1.1.2-10 RTM-TO-ISE SOURCE INTERFACE ANALYSIS SCREEN	19
EXHIBIT 1.1.2-11 RTM-TO-ISE DESTINATION INTERFACE ANALYSIS SCREEN	21

# 1.1 RTM to ISE Application

The Purpose of the RTM-TO-ISE tool is to replicate a specific release, generally the latest, of the requirements and their associated data elements from the Oracle database which is used by the RTM application to the Sybase which is used by the TMDB tool. The Oracle database is a bundled product and as such is a read only product, nor does RTM easily allow data queries to its underlying database structures.

Each screen of the RTM-TO-ISE tool presents an analysis task to be performed on a separate field brought across to the ISE database. Initially the two databases' requirements must be aligned. Each database must have the same requirements. The RTM contains requirements that have been superseded, replaced, deleted, etc. The ISE database that TMDB uses will only contain the current requirements to enhance productivity, i.e., record count. The analysis performed to align the current requirements will identify requirements that are to be removed from or added to the ISE database. If more information is needed on a specific requirement being removed from the ISE, the RTM can be accessed off-line to make that inquiry.

Several screens are used to make the various field analyses because RTM/Oracle stores the data in so many different tables with keys, etc. The ISE data is all in one table making life much simpler. The queries into Oracle are quite long and cannot easily be connected to analyze all the fields at the same time. This operation needs only to be done when a new release is performed.

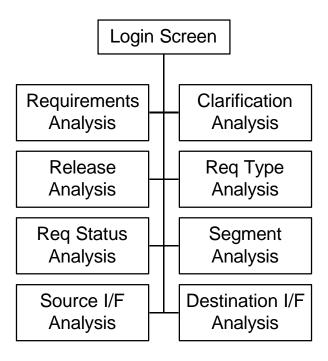
Recently, Raytheon has been making schema changes to their database. Each change must be evaluated for impact to the structure of the RTM-TO-ISE since it must be able to read Oracle correctly. Also, any enhancements made to the schema of the RTM must be taken advantage of in the ISE side. The ISE database must remain stable and downward compatible hence another need for this RTM-TO-ISE tool, to isolate changes to the TMDB tool.

# 1.1.1 RTM-TO-ISE Installation and Startup

The RTM-TO-ISE application requires remote access to both an Oracle database maintained by the RTM tool and a Sybase database where the requirements data is stored. In order to connect to these remote databases, network connectivity software is used. Open Client is used to connect to Sybase. SQLNet is used to connect to Oracle. These products must be installed on the client machine before the RTM-TO-ISE executable software is loaded. See Appendix A for detailed instructions on Open Client installation. See Appendix B for detailed instructions on SQLNet installation.

Once the connectivity software is installed and tested a C:\RTM2ISE subdirectory should be created on the client machine. In this subdirectory is placed: a copy of the executable code, the necessary report files, and the deployment files supplied by Gupta for SQLWindows applications.

# 1.1.2 RTM-TO-ISE Graphical User Interface



**Exhibit 1.1.2-1 RTM-TO-ISE Menu Hierarchy** 

Exhibit 1.1.2-1 represents the hierarchy of menu choices presented in using the RTM-TO-ISE. The following subsections detail the user interface design for the RTM-TO-ISE.

# 1.1.2.1 RTM-TO-ISE Login Screen

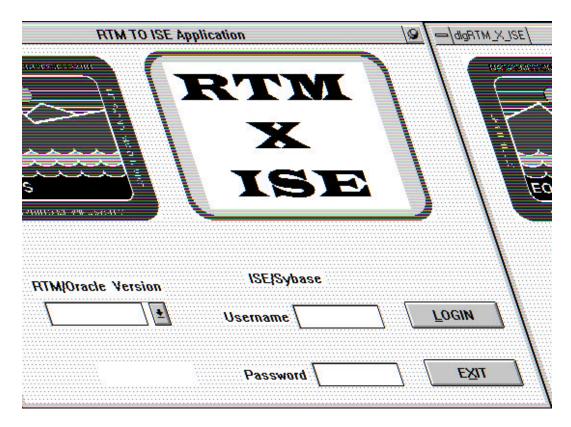


Exhibit 1.1.2-2 RTM-TO-ISE Login Screen

1. RTM/Oracle Version

This data entry field allows the user to select a specific version stored on the Sun Server under the Oracle RTM database. Also, if the right down arrow is clicked, it displays a list of the current available versions.

- 2. ISE/Sybase Username
  - This data entry field captures the Username for logging into the Sybase ISE database.
- 3. ISE/Sybase Password
  - This data entry field captures the Password for logging into the Sybase ISE database.

#### **BUTTONS:**

- 1. **LOGIN** (ALT L)
  - This button initiates the Login sequence to both the Oracle and ISE databases.
- 2. **EXIT** (ALT X)
  - This button is used to close the RTM-TO-ISE application without logging in.

#### 1.1.2.2 RTM-TO-ISE Toolbar

This is the toolbar for the RTM-To-ISE application. This toolbar is visible at all times within all screens. All of the various screens can be launched at any time from this toolbar. The various analysis tasks to be launched, in the typical order of invocation are:

REQ - Requirements Analysis Task

CLARIFY - Clarification Text Analysis Task

RELEASE - Release Analysis Task

TYPE - Type Analysis Task STATUS - Status Analysis Task SEGMENT - Segment Analysis Task SOURCE - Source Interface Analysis Task DESTINATION - Destination Interface Analysis Task ISE VERSION - ISE Database Version Stamp Task

Depressing the EXIT button on this screen terminates the RTM-To-ISE application.

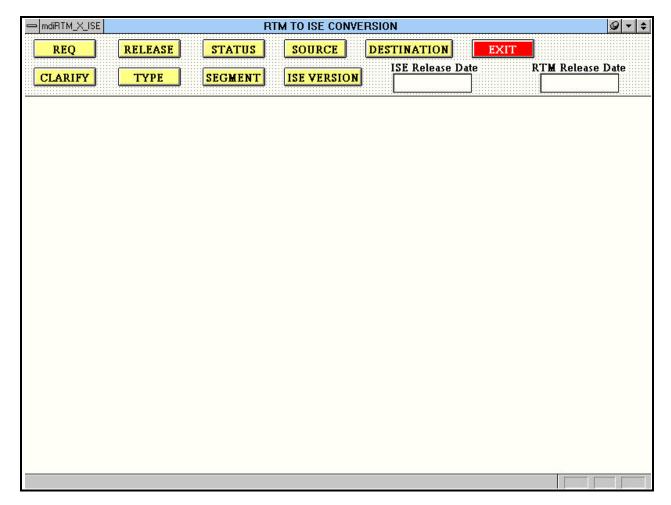


Exhibit 1.1.2-3 RTM-TO-ISE Toolbar

#### **FIELDS:**

1. ISE Release Date

This display field presents the current Sybase ISE Release Date. This date complies with the ISE date stamp of the most recently saved database. Multiple versions of this database are not saved on-line. This field is updated if the ISE VERSION button is depressed.

2. RTM Release Date

This display field presents the currently selected Oracle RTM Release Date. Oracle currently retains all releases submitted by Hughes. Note that the ISE and RTM database must match due to the generation of multiple schemas spawned by the Hughes developers. Typically the latest RTM release is the proper selection.

#### **BUTTONS:**

# 1. **REQ**

This button initiates a task which compares a specific Oracle RTM database with a specific Sybase ISE database. The analysis includes the capability to identify deleted requirements, inserted requirements, updates to the requirement description text field or Class ID field.

#### 2. CLARIFY

This button initiates a task which compares a specific Oracle RTM database requirement record with a specific Sybase ISE database requirement record. The comparison identifies any changes made to the clarification text field associated with the selected requirement. Each requirement is selected by the unique combination of a requirements record key and its associated Class ID.

#### 3. RELEASE

This button initiates a task which compares a specific Oracle RTM database requirement record with a specific Sybase ISE database requirement record. The comparison identifies any changes made to the requirement's release field associated with the selected requirement. Each requirement is selected by the unique combination of a requirements record key and its associated Class ID.

#### 4. **TYPE**

This button initiates a task which compares a specific Oracle RTM database requirement record with a specific Sybase ISE database requirement record. The comparison identifies any changes made to the requirement's type field associated with the selected requirement. Each requirement is selected by the unique combination of a requirements record key and its associated Class ID.

#### 5. STATUS

This button initiates a task which compares a specific Oracle RTM database requirement record with a specific Sybase ISE database requirement record. The comparison identifies any changes made to the requirement's status field associated with the selected requirement. Each requirement is selected by the unique combination of a requirements record key and its associated Class ID.

#### 6. **SEGMENT**

This button initiates a task which compares a specific Oracle RTM database requirement record with a specific Sybase ISE database requirement record. The comparison identifies any changes made to the requirement's segment field associated with the selected requirement. Each requirement is selected by the unique combination of a requirements record key and its associated Class ID.

#### 7. SOURCE

This button initiates a task which compares a specific Oracle RTM database requirement record with a specific Sybase ISE database requirement record. The comparison identifies any changes made to the requirements source interface field associated with the selected requirement. Each requirement is selected by the unique combination of a requirements record key and its associated Class ID.

#### 8. **DESTINATION**

This button initiates a task which compares a specific Oracle RTM database requirement record with a specific Sybase ISE database requirement record. The comparison identifies any changes made to the requirements destination interface field associated with the selected requirement. Each requirement is selected by the unique combination of a requirements record key and its associated Class ID.

#### 9. **ISE VERSION**

This button allows the user to place a current date/time stamp on the newly analyzed version of the Sybase ISE database.

#### 10. **EXIT**

This button terminates the RTM-TO-ISE application.

# 1.1.2.3 RTM-TO-ISE Requirements Analysis Screen

The Requirements Analysis Screen is the initial screen to invoke when a new Hughes RTM database is received. This task steps through each requirement and identifies if new classes have been inserted or deleted. The uniqueness for each requirement is defined by the Class ID and the Req Key fields.

When this task is invoked, the initial action that occurs autonomously is the loading of both the RTM and the ISE requirements to the child tables. These tables are a subset of all of the available fields, but these are the only fields pertinent to inserted or deleted records. The user may scan all of the records of either table as desired.

The first step is to analyze the selected databases. This is invoked by depressing the **Analyze** button. The user may view the operation, but it goes very rapidly and cannot be interrupted. The task may take 15 minutes or longer depending upon the number of database users and the users processor speed.

The appropriate display fields indicate the progress of the operation and a running summary of the results, i.e., number of deleted, inserted, or changed requirements. A timer is displayed in the bottom right corner to post the user on elapsed time since depressing the **Analyze** button.

When the analysis is completed, the user may view the Inserts, Deltas, or Deletes by depressing those respective buttons. These records are viewed in a notepad application which only holds 64k characters. If more space is needed to display results, Write or Word applications must be utilized. The respective text files have by this time been closed so the user can utilize these other viewers concurrently.

The final step in the analysis upon reviewing all inserts, deletions, and changes is to update the ISE database by depressing the **Update** button. This operation may take several minutes to update depending the extent of the updates to the database. The updates only affect the fields listed, i.e., Requirement ID, Class ID, and Text (inserts and deletes for Requirement/Class ID and changes for Text).

After this analysis is completed, the user proceeds to the next field analysis, i.e. **CLARIFY**, **RELEASE**, **TYPE**, **STATUS**, **SEGMENT**, **SOURCE**, or **DESTINATION**.

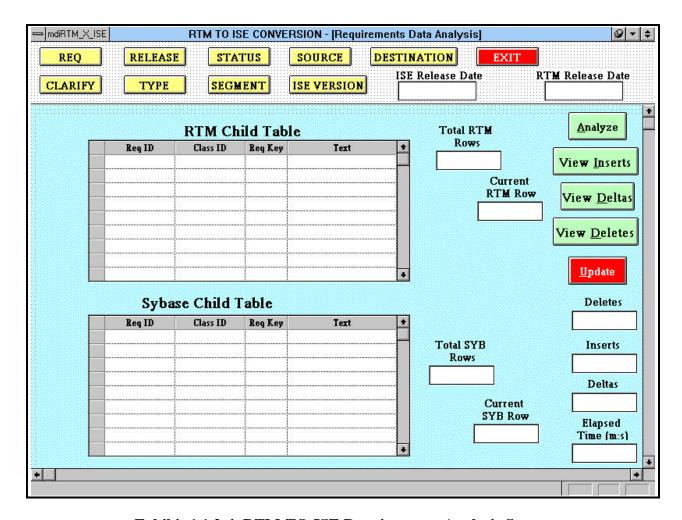


Exhibit 1.1.2-4 RTM-TO-ISE Requirements Analysis Screen

#### 1. Total RTM Rows

This display field shows the total number of records in the RTM Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the Oracle RTM Database, for the selected release.

#### 2. Current RTM Row

This display field shows the current RTM Child Table Row that is currently in focus, i.e., being analyzed.

#### 3. Total SYB Rows

This display field shows the total number of records in the SYBASE Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the SYBASE ISE Database for the current release.

#### 4. Current SYB Rows

This display field shows the current SYBASE Child Table Row that is currently in focus, i.e., being analyzed.

#### 5. Deletes

This display field shows the current number of records in the SYBASE Child Table that are not in the RTM Child Table, i.e., records to be deleted to make the SYBASE Child Table to look like the RTM Child Table.

#### 6. Inserts

This display field shows the current number of records in the RTM Child Table that are not in the

SYBASE Child Table, i.e., records to be inserted into the SYBASE Child Table to look like the RTM Child Table.

7. Deltas

This display field shows the current number of records in the SYBASE Child Table that need to changed to replicate the RTM Child Table.

8. Elapsed Time (h:m:s)

This display field shows the elapsed time when the analysis task has completed. The format is in (hours:minutes:seconds).

9. Reg ID (RTM Child Table Column)

This display field shows the Requirement ID Title.

10. Class ID (RTM Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

11. Reg Key (RTM Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

12. Text (RTM Child Table Column)

This display field shows the descriptive Text associated with a particular Requirement ID and Class ID.

13. Req ID (SYBASE Child Table Column)

This display field shows the Requirement ID Title.

14. Class ID (SYBASE Child Table Column)

This display field shows the Class ID associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

15. Req Key (SYBASE Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

16. Text (SYBASE Child Table Column)

This display field shows the descriptive Text associated with a particular Requirement ID and Class ID

#### **BUTTONS:**

1. **Analyze** (ALT - A)

This button initiates an analysis of the two tables, identifying any discrepancies and reporting them to the appropriate field, i.e., insert, delete, or delta.

2. **View Inserts** (ALT - I)

This button brings up a window (NOTEPAD application) displaying the records that appear in the RTM Table but not in the SYBASE Table.

3. **View Deltas** (ALT - D)

This button brings up a window (NOTEPAD application) displaying the records that differ between the SYBASE Table and the RTM Table.

4. **View Deletes** (ALT - E)

This button bring up a window (NOTEPAD application) displaying the records that appear in the SYBASE Table but not in the RTM Table.

5. **Update** (ALT - U)

This button initiates an update of the SYBASE ISE database, performing inserts, deletes and changes.

# 1.1.2.4 RTM-TO-ISE Clarification Text Analysis Screen

The Clarification Text Analysis task populates the two child tables, RTM and Sybase, with all of the clarification records in each database. The Requirement Key and Class ID association is unique within the database. Not all requirements have clarification data associated with them.

If another analysis task from the toolbar is not selected, then **EXIT** is depressed to terminate the application.

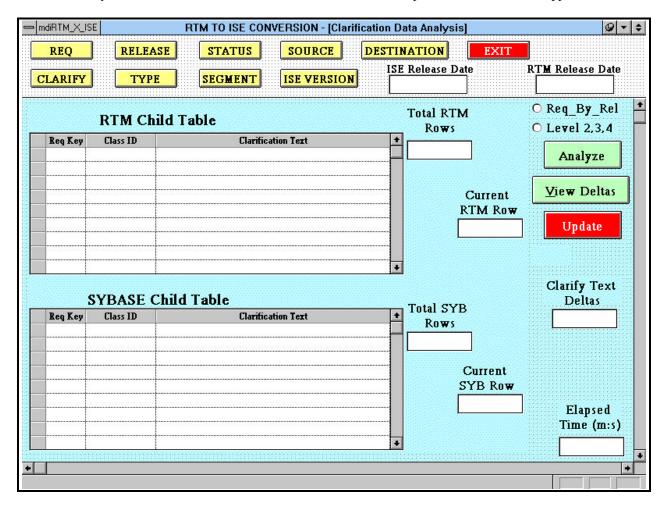


Exhibit 1.1.2.5 RTM-TO-ISE Clarification Text Analysis Screen

#### **FIELDS:**

1. Total RTM Rows

This display field shows the total number of records in the RTM Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the Oracle RTM Database, for the selected release.

- 2. Current RTM Row
  - This display field shows the current RTM Child Table Row that is currently in focus, i.e., being analyzed.
- 3. Total SYB Rows
  - This display field shows the total number of records in the SYBASE Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the SYBASE ISE Database for the current release.
- Current SYB Row
   This display field shows the current SYBASE Child Table Row that is currently in focus, i.e., being analyzed.

### 5. Clarify Text Deltas

This display field shows the current number of records in the SYBASE Child Table that need to changed to replicate the RTM Child Table.

#### 6. Elapsed Time (h:m:s)

This display field shows the elapsed time when the analysis task has completed. The format is in (hours:minutes:seconds).

#### 7. Reg Key (RTM Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

#### 8. Class ID (RTM Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

9. Clarification Text (RTM Child Table Column)

This display field shows the clarification Text associated with a particular Requirement ID and Class ID.

#### 10. Req Key (SYBASE Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

#### 11. Class ID (SYBASE Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

12. Clarification Text (SYBASE Child Table Column)

This display field shows the clarification Text associated with a particular Requirement ID and Class ID.

#### **BUTTONS:**

#### 1. **Reg By Rel** or **Level 2, 3, 4** (Radio Button)

The clarification text for these two classes of requirements are located in different tables within the RTM database. As a result the loading, analysis, and update must be performed separately.

# 2. **Analyze** (ALT - A)

This button initiates an analysis of the two tables, identifying any discrepancies and reporting them to the Delta field.

#### 3. **View Deltas** (ALT - V)

This button brings up a window (NOTEPAD application) displaying the records that differ between the SYBASE Table and the RTM Table.

4. **Update** (ALT - U)

This button initiates an update of the SYBASE ISE database, performing the required changes.

# 1.1.2.5 RTM-TO-ISE Release Analysis Screen

The Release Analysis task populates the two child tables, RTM and Sybase, with all of the Release associated records in each database. The Requirement Key and Class ID association is unique within the database. All requirements should have release data associated with them.

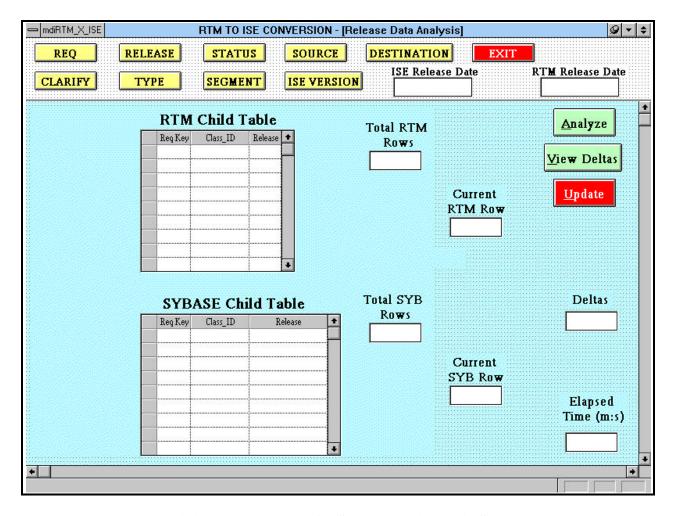


Exhibit 1.1.2.6 RTM-TO-ISE Release Analysis Screen

#### 1. Total RTM Rows

This display field shows the total number of records in the RTM Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the Oracle RTM Database, for the selected release.

#### 2. Current RTM Row

This display field shows the current RTM Child Table Row that is currently in focus, i.e., being analyzed.

#### 3. Total SYB Rows

This display field shows the total number of records in the SYBASE Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the SYBASE ISE Database for the current release.

#### 4. Current SYB Row

This display field shows the current SYBASE Child Table Row that is currently in focus, i.e., being analyzed.

#### 5. Clarify Text Deltas

This display field shows the current number of records in the SYBASE Child Table that need to changed to replicate the RTM Child Table.

#### 6. Elapsed Time (h:m:s)

- 7. Req Key (RTM Child Table Column)
  - This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.
- 8. Class ID (RTM Child Table Column)
  - This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.
- 9. Release (RTM Child Table Column)
  - This display field shows the release data associated with a particular Requirement ID and Class ID.
- 10. Req Key (SYBASE Child Table Column)
  - This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.
- 11. Class ID (SYBASE Child Table Column)
  - This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.
- 12. Release (SYBASE Child Table Column)
  This display field shows the release data associated with a particular Requirement ID and Class ID.

#### **BUTTONS:**

- 1. **Analyze** (ALT A)
  - This button initiates an analysis of the two tables, identifying any discrepancies and reporting them to the Delta field.
- 2. View Deltas (ALT V)
  - This button brings up a window (NOTEPAD application) displaying the records that differ between the SYBASE Table and the RTM Table.
- 3. **Update** (ALT U)
  - This button initiates an update of the SYBASE ISE database, performing the required changes.

# 1.1.2.6 RTM-TO-ISE Requirement Type Analysis Screen

The Requirement Type Analysis task populates the two child tables, RTM and Sybase, with all of the Type associated records in each database. The Requirement Key and Class ID association is unique within the database. Not all requirements have requirement Type data associated with them.

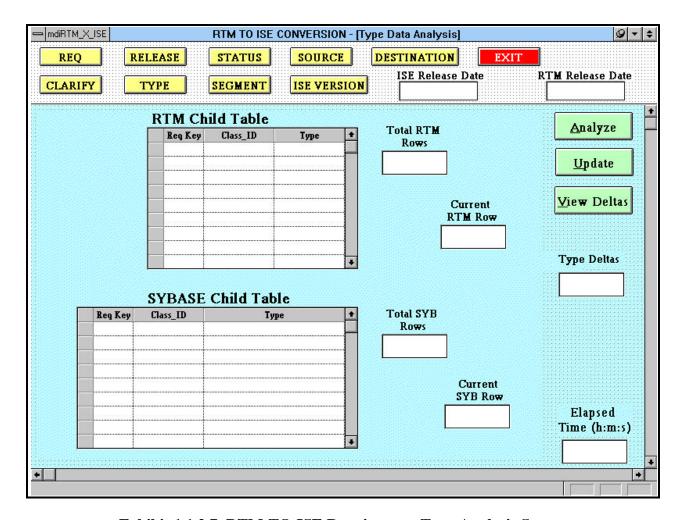


Exhibit 1.1.2.7 RTM-TO-ISE Requirement Type Analysis Screen

#### Total RTM Rows

This display field shows the total number of records in the RTM Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the Oracle RTM Database, for the selected release.

#### 2. Current RTM Row

This display field shows the current RTM Child Table Row that is currently in focus, i.e., being analyzed.

#### 3. Total SYB Rows

This display field shows the total number of records in the SYBASE Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the SYBASE ISE Database for the current release.

#### 4. Current SYB Row

This display field shows the current SYBASE Child Table Row that is currently in focus, i.e., being analyzed.

#### 5. Type Deltas

This display field shows the current number of records in the SYBASE Child Table that need to changed to replicate the RTM Child Table.

#### 6. Elapsed Time (h:m:s)

7. Req Key (RTM Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

8. Class ID (RTM Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

9. Type (RTM Child Table Column)

This display field shows the requirement Type data associated with a particular Requirement ID and Class ID.

10. Reg Key (SYBASE Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

11. Class ID (SYBASE Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

12. Type (SYBASE Child Table Column)

This display field shows the requirement Type data associated with a particular Requirement ID and Class ID.

#### **BUTTONS:**

1. **Analyze** (ALT - A)

This button initiates an analysis of the two tables, identifying any discrepancies and reporting them to the Delta field.

2. View Deltas (ALT - V)

This button brings up a window (NOTEPAD application) displaying the records that differ between the SYBASE Table and the RTM Table.

3. Update (ALT - U)

This button initiates an update of the SYBASE ISE database, performing the required changes.

#### 1.1.2.7 RTM-TO-ISE Requirement Status Analysis Screen

The Requirement Status Analysis task populates the two child tables, RTM and Sybase, with all of the Status data associated records in each database. The Requirement Key and Class ID association is unique within the database. Not all requirements have requirement status data associated with them.

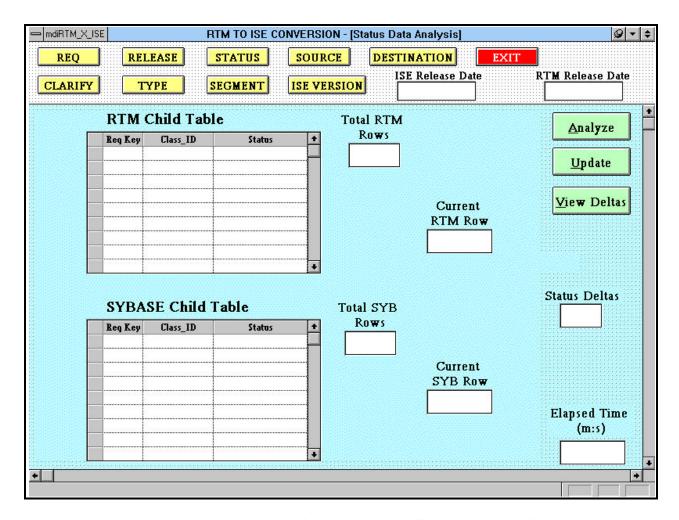


Exhibit 1.1.2-8 RTM-TO-ISE Requirement Status Analysis Screen

#### 1. Total RTM Rows

This display field shows the total number of records in the RTM Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the Oracle RTM Database, for the selected release.

#### 2. Current RTM Row

This display field shows the current RTM Child Table Row that is currently in focus, i.e., being analyzed.

#### 3. Total SYB Rows

This display field shows the total number of records in the SYBASE Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the SYBASE ISE Database for the current release.

#### 4. Current SYB Row

This display field shows the current SYBASE Child Table Row that is currently in focus, i.e., being analyzed.

#### 5. Clarify Text Deltas

This display field shows the current number of records in the SYBASE Child Table that need to changed to replicate the RTM Child Table.

## 6. Elapsed Time (h:m:s)

7. Req Key (RTM Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

8. Class ID (RTM Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

9. Status (RTM Child Table Column)

This display field shows the requirement Status data associated with a particular Requirement ID and Class ID.

10. Reg Key (SYBASE Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

11. Class ID (SYBASE Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

12. Status (SYBASE Child Table Column)

This display field shows the requirement Status data associated with a particular Requirement ID and Class ID.

#### **BUTTONS:**

1. **Analyze** (ALT - A)

This button initiates an analysis of the two tables, identifying any discrepancies and reporting them to the Delta field.

2. View Deltas (ALT - V)

This button brings up a window (NOTEPAD application) displaying the records that differ between the SYBASE Table and the RTM Table.

3. Update (ALT - U)

This button initiates an update of the SYBASE ISE database, performing the required changes.

# 1.1.2.8 RTM-TO-ISE Segment Analysis Screen

The Requirement Segment Analysis task populates the two child tables, RTM and Sybase, with all of the Segment data associated records in each database. The Requirement Key and Class ID association is unique within the database. Not all requirements have requirement segment data associated with them.

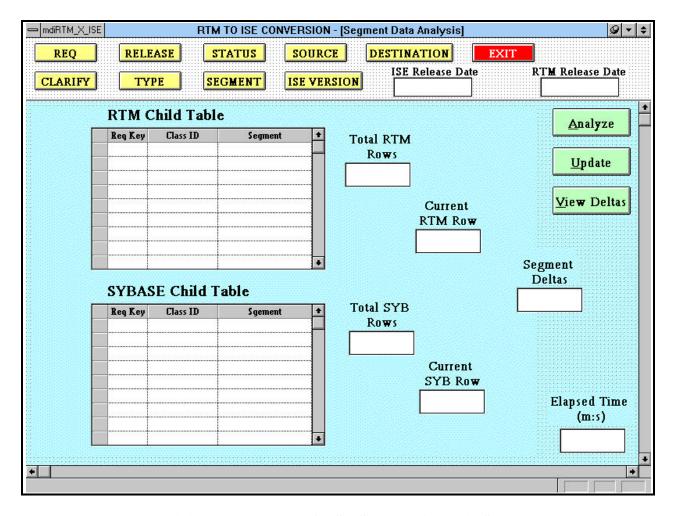


Exhibit 1.1.2-9 RTM-TO-ISE Segment Analysis Screen

#### 1. Total RTM Rows

This display field shows the total number of records in the RTM Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the Oracle RTM Database, for the selected release.

#### 2. Current RTM Row

This display field shows the current RTM Child Table Row that is currently in focus, i.e., being analyzed.

#### 3. Total SYB Rows

This display field shows the total number of records in the SYBASE Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the SYBASE ISE Database for the current release.

#### 4. Current SYB Row

This display field shows the current SYBASE Child Table Row that is currently in focus, i.e., being analyzed.

#### 5. Clarify Text Deltas

This display field shows the current number of records in the SYBASE Child Table that need to changed to replicate the RTM Child Table.

#### 6. Elapsed Time (h:m:s)

7. Req Key (RTM Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

8. Class ID (RTM Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

9. Release (RTM Child Table Column)

This display field shows the clarification Text associated with a particular Requirement ID and Class ID.

10. Reg Key (SYBASE Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

11. Class ID (SYBASE Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

12. Release (SYBASE Child Table Column)

This display field shows the clarification Text associated with a particular Requirement ID and Class ID.

#### **BUTTONS:**

1. **Analyze** (ALT - A)

This button initiates an analysis of the two tables, identifying any discrepancies and reporting them to the Delta field.

2. View Deltas (ALT - V)

This button brings up a window (NOTEPAD application) displaying the records that differ between the SYBASE Table and the RTM Table.

3. Update (ALT - U)

This button initiates an update of the SYBASE ISE database, performing the required changes.

# 1.1.2.9 RTM-TO-ISE Source Interface Analysis Screen

The Requirement Source Interface Analysis task populates the two child tables, RTM and Sybase, with all of the Source Interface data associated records in each database. The Requirement Key and Class ID association is unique within the database. Not all requirements have requirement Source Interface data associated with them.

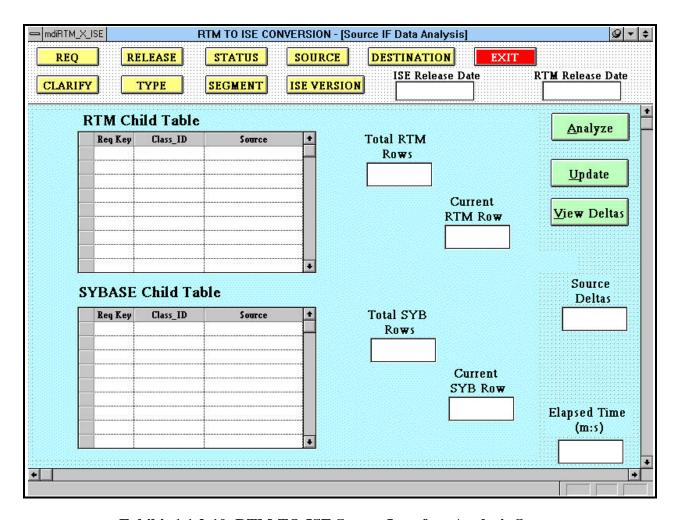


Exhibit 1.1.2-10 RTM-TO-ISE Source Interface Analysis Screen

#### Total RTM Rows

This display field shows the total number of records in the RTM Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the Oracle RTM Database, for the selected release.

#### 2. Current RTM Row

This display field shows the current RTM Child Table Row that is currently in focus, i.e., being analyzed.

## 3. Total SYB Rows

This display field shows the total number of records in the SYBASE Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the SYBASE ISE Database for the current release.

#### 4. Current SYB Row

This display field shows the current SYBASE Child Table Row that is currently in focus, i.e., being analyzed.

#### 5. Clarify Text Deltas

This display field shows the current number of records in the SYBASE Child Table that need to changed to replicate the RTM Child Table.

#### 6. Elapsed Time (h:m:s)

7. Req Key (RTM Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

8. Class ID (RTM Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

9. Source (RTM Child Table Column)

This display field shows the requirement Source Interface data associated with a particular Requirement ID and Class ID.

10. Req Key (SYBASE Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

11. Class ID (SYBASE Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

12. Source (SYBASE Child Table Column)

This display field shows the requirement Source Interface data associated with a particular Requirement ID and Class ID.

#### **BUTTONS:**

1. **Analyze** (ALT - A)

This button initiates an analysis of the two tables, identifying any discrepancies and reporting them to the Delta field.

2. View Deltas (ALT - V)

This button brings up a window (NOTEPAD application) displaying the records that differ between the SYBASE Table and the RTM Table.

3. Update (ALT - U)

This button initiates an update of the SYBASE ISE database, performing the required changes.

# 1.1.2.10 RTM-TO-ISE Destination Interface Analysis Screen

The Requirement Destination Interface Analysis task populates the two child tables, RTM and Sybase, with all of the Destination Interface data associated records in each database. The Requirement Key and Class ID association is unique within the database. Not all requirements have requirement Destination Interface data associated with them.

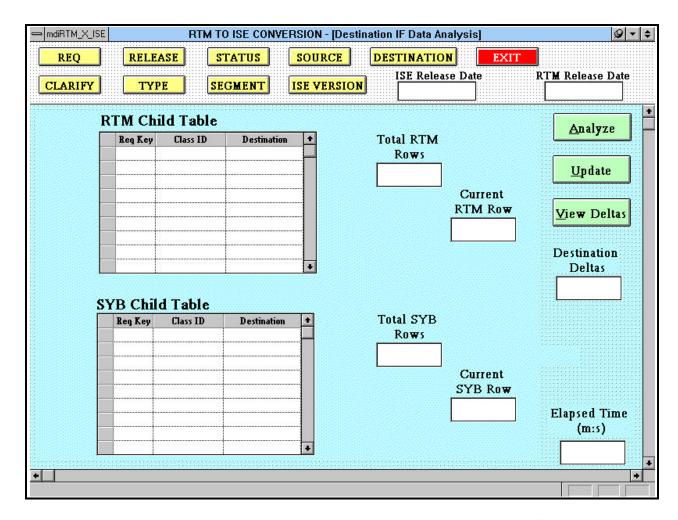


Exhibit 1.1.2-11 RTM-TO-ISE Destination Interface Analysis Screen

#### 1. Total RTM Rows

This display field shows the total number of records in the RTM Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the Oracle RTM Database, for the selected release.

#### 2. Current RTM Row

This display field shows the current RTM Child Table Row that is currently in focus, i.e., being analyzed.

#### 3. Total SYB Rows

This display field shows the total number of records in the SYBASE Child Table. For the requirements analysis, this is the total number of unique Requirement ID and Class ID combinations in the SYBASE ISE Database for the current release.

#### 4. Current SYB Row

This display field shows the current SYBASE Child Table Row that is currently in focus, i.e., being analyzed.

#### 5. Clarify Text Deltas

This display field shows the current number of records in the SYBASE Child Table that need to changed to replicate the RTM Child Table.

#### 6. Elapsed Time (h:m:s)

7. Req Key (RTM Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

8. Class ID (RTM Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

9. Destination (RTM Child Table Column)

This display field shows the requirement Destination Interface data associated with a particular Requirement ID and Class ID.

10. Reg Key (SYBASE Child Table Column)

This display field shows the Requirement Key associated with a particular requirement. Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

11. Class ID (SYBASE Child Table Column)

This display field shows the Class ID associated with a particular requirement Each Requirement ID can be associated with several Class IDs and for each Requirement Key there is one Requirement ID.

12. Release (SYBASE Child Table Column)

This display field shows the requirement Destination Interface data associated with a particular Requirement ID and Class ID.

#### **BUTTONS:**

1. **Analyze** (ALT - A)

This button initiates an analysis of the two tables, identifying any discrepancies and reporting them to the Delta field.

2. View Deltas (ALT - V)

This button brings up a window (NOTEPAD application) displaying the records that differ between the SYBASE Table and the RTM Table.

3. **Update** (ALT - U)

This button initiates an update of the SYBASE ISE database, performing the required changes.